



PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT NO.: 6,707,229 B1

PATENTEE: MARTIN, G. PCT

ISSUED: MARCH 16, 2004

\* SERIAL NO.: 09/980,343

FILED: NOVEMBER 30, 2001

TITLE: SURFACE ACOUSTIC WAVE FILTER

**REQUEST FOR CERTIFICATE OF CORRECTION**  
**UNDER 37 C.F.R. 1.322 and 1.323**

**ATTN: Certificate of Correction**

**Mail Stop Petition**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Certificate  
JUN 01 2004  
of Correction

05/26/2004 WASFAM2 00000222 032468 6707229  
01 FC:1811 100.00 DA

Dear Sir:

In accordance with the provisions of 37 C.F.R. 1.322 and 1.323 of the Rules of Practice, which implement 35 U.S.C. 254 and 255, approval of the attached Certificate of Correction for the above-identified patent to correct the errors noted below appearing in the issued patent is respectfully requested.

Most recently, in reviewing the above-identified patent, it was discovered that typographical errors appeared in claims 1, 7, 11, 17, 20, and 21, which should be corrected.

In particular:

In column 6, line 14 (Line 13 of Claim 1) please change the word "the" to --two--.

In column 6, line 48 (Line 2 of Claim 7) please delete the word "character".

In column 7, line 2 (Line 2 of Claim 11) please delete the word "character".

2 JUN 2004

In column 7, line 28 (Line 3 of Claim 17) please change the word "leave" to --have--.

In column 8, line 13 (Line 6 of Claim 20) "+λ4" should correctly read --+λ/4--.

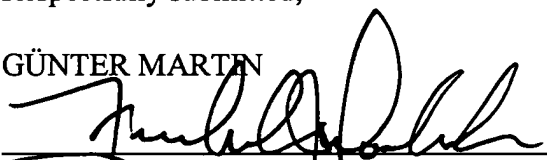
In column 8, line 18 (Line 1 of Claim 21) please change the word "weave" to --wave--.

Except for Claim 21, which was the fault of the Applicant, the errors were the fault of the PTO, as attested to by the attached excerpts from the Amendment in Response to the First Office Action dated April 25, 2003. The Commissioner is authorized to charge the official fee of \$100.00 to Deposit Account No. 03-2468. Please charge any additional fees or credit any overpayment to Deposit Account No. 03-2468.

Accordingly, approval of the attached Certificate of Correction is respectfully requested.

Respectfully submitted,

GÜNTER MARTIN



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Enclosures: Certificate of Correction in duplicate  
Excerpts from the Amendment in Response to the First Office Action dated April 25, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MAIL STOP Petition-Certificate of Corrections, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 21, 2004.



Maria Guastella

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DATED : MARCH 16, 2004  
INVENTOR(S) : MARTIN, G. PCT

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In column 8, line 13 (Line 6 of Claim 20) please change "+λ4" to --+λ/4--.

In column 8, line 18 (Line 1 of Claim 21) please change the word "weave" to --wave--.

MAILING ADDRESS OF SENDER:

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PATENT NO. 6,707,229

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~~add/or bandwidth~~ The structure is tapered in the direction of the fingers so that not only the width of equivalent fingers and gaps, but also the intermediate space between the two transducers only vary by one and the same factor along two parallel straight lines, wherein said lines of all fingers of both transducers intersect one another in such a manner that in each transducer, the spacings of the center lines of equivalent fingers are the same in all groups of fingers.

2. (cancelled)

3. (currently amended) The surface acoustic wave filter according to claim 2, ~~characterized in that in the structure tapering in the direction of the fingers, wherein the structure~~ is tapered in the direction of the fingers by reducing the width of the fingers ~~(231 to 233, 331 to 333)~~ and of the gaps located between said fingers ~~is reduced~~ in a step-like manner.

4. (currently amended) The surface acoustic wave filter according to claim 3, ~~characterized in that~~ wherein all equivalent corner points ~~(208, 209)~~ of ~~one and the same~~ a single

finger edge are disposed on a curve, ~~whereby the~~ and wherein straight-lined extensions ~~(26, 36)~~ intersect of all of said curves of the two transformers ~~(2, 3)~~ and intersect each other beyond the corresponding finger area ~~in one and the~~ at a single point.

5. (currently amended) The surface acoustic wave filter according to claim 4, ~~characterized in that~~ wherein each finger stage contains a rectangular finger section with vertical or parallel limitations in relation to the direction of spreading ~~in each case, whereby~~ and wherein the two limitations extending parallel with the direction of spreading of all finger sections of the same stage ~~in each case~~ form a straight line of limitation, so that the finger areas disposed ~~in each case~~ between said two straight lines of limitation represent filter channels ~~(201, 203, 205, 207)~~ separated from each other by intermediate areas ~~(202, 204, 206)~~.

6. (currently amended) The surface acoustic wave filter according to claim 5, ~~characterize in that,~~ further comprising additional collector electrodes ~~are arranged~~ disposed in the intermediate areas ~~(202, 204, 206)~~ ~~in such a manner~~ so that in case such additional collector electrodes belong to different

finger area have the direction of the tangent of the corresponding curve at the borderline of the corresponding finger area.

10. (currently amended) The surface acoustic wave filter according to claim 1, ~~characterized in that~~ wherein each finger group ~~(23 to 25, 33 to 35)~~ of both transducers ~~(2, 3)~~ contains two fingers.

11. (currently amended) The surface acoustic wave filter according to claim 1, ~~characterized in that~~ wherein each finger group ~~(23 to 25, 33 to 35)~~ of both transducers ~~(2, 3)~~ contains three fingers.

12. (currently amended) The surface acoustic wave filter according to claim 11, ~~characterized in that~~ wherein three fingers ~~(232, 233, and 332, 333, respectively)~~ of each one finger group ~~(23 to 25, 33 to 35, respectively)~~ form a pair of fingers, whereby the fingers of a pair of fingers are equally wide and are connected to different collector electrodes ~~(21, 22, and 31, 32, respectively)~~, and are arranged in relation to one another in such a manner that the pair of fingers is without reflection overall and the third finger ~~(231 and 331, respectively)~~ is in each case a reflector finger.

reflector finger ~~(231, 331)~~ of said finger group from the other groups of fingers amounts to  $n\lambda/2$   $\pm \lambda/4$ , whereby  $\lambda$  is the wavelength associated with the mean frequency along a straight line intersecting all fingers in such a manner that in each transducer ~~(2, 3)~~, all finger groups ~~(23 to 25, 33 to 35)~~ along said line are equally wide, and that "n" is an integer.

18. (currently amended) The surface acoustic wave filter according to claim 15 or 16, ~~characterized in that~~ wherein the source intensity function and the reflection function are determined by means of an optimization method.

19. (currently amended) The surface acoustic wave filter according to claim 15, ~~characterized in that~~ wherein at least some of the finger groups ~~(23 to 25, 33 to 35)~~, the latter being designated as structured finger groups, are subdivided in at least one transducer parallel with the collector electrodes in a number of sub-transducers which are electrically connected in series.

20. (currently amended) The surface acoustic wave filter according to claim 19, ~~characterized in that~~ wherein all sub-transducers of one and the same structured finger group have the same aperture.